



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/674,595

09/30/2003

Nilo L. Villarin

1319/05

4488

7590

04/05/2006

Roland H. Shubert  
Post Office Box 2339  
Reston, VA 20195-0339

EXAMINER

KAPLAN, HAL IRA

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/674,595

Applicant(s)

VILLARIN, NILO L.

Examiner

Hal I. Kaplan

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The disclosure is objected to because of the following informalities: Page 3, line 19 contains the phrase "loads 20". It appears this should read "loads 22". Page 3, line 24 contains the word "locate". It appears this should be "located".

Appropriate correction is required.

### ***Drawings***

2. The drawing was received on September 30, 2003. This drawing is accepted.

### ***Claim Objections***

3. Claims 1 and 4 are objected to because of the following informalities: Claim 1 line 11, the phrase "said power source" lacks proper antecedent basis. Claim 1 line 14, the phrase "the logic means" lacks proper antecedent basis. Claim 4 line s 8-9, the phrase "said second" lacks proper antecedent basis. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 1 recites the limitation "said power means" in line 17. There is insufficient antecedent basis for this limitation in the claim. It is not clear to what this is referring. In addition, it appears this should read "said electrical load", as the specification and Figure disclose one switch for each load, with each switch having a throw position for

Art Unit: 2836

each of the power sources (see page 3, lines 7-9 and page 4, lines 16-19). The loads do not each have two switches, with one switch connecting the load to the first power source, and the other switch connecting the load to the second power source. Claims 2-8 inherit this deficiency.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the US patent of Hohri (6,879,060).

As to claim 1, Hohri, drawn to a method and apparatus for transfer control and undervoltage detection in an automatic transfer switch, teaches, in Figures 1 and 3, means to control the switching of a plurality of electrical loads from a primary power source to a secondary power source upon corruption of the primary source, comprising: a first logic means (303,304,305) that is arranged to accept power from the primary

Art Unit: 2836

source (3,301) and to monitor selected parameters of the power source (see column 4, lines 35-54); first circuit breaker means (5) communicating with the first logic means (303,304,305) and arranged to interrupt power flow from the primary source upon the detection by the logic means (303,304,305) of an out of tolerance current parameter (see column 3, lines 50-52); second circuit breaker means (6) (see column 3, lines 52-54); an electrical load (2), arranged to accept power either from the primary power source (3,301) or from the secondary power source (4); and a switch (1), for the electrical load (2), comprising a coil-activated, double throw electro-mechanical relay that will drop out of a first throw position to a second throw position upon a reduction of voltage across the coil, the relay in its first throw position allowing current to flow from the primary source (3,301) through the relay coil and to the load (2), the relay in its second throw position allowing current to flow from the secondary source (4) through the relay coil and to the load (2) (see column 3, lines 32-33 and 45-54, and column 10, line 55 through column 11, line 2).

Hohri does not disclose:

- (a) a second logic means;
- (b) a second electrical load; or
- (c) a second switch, for the second electrical load.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to build the switch of Hohri with a second logic means identical to the first, arranged to accept power from the secondary source and to monitor selected parameters of the second power source, analogous to the first logic means, and a second electrical load with a second switch, analogous to the first load and switch,

Art Unit: 2836

because it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). See MPEP §2144.04 VI(B).

As to claims 2, 4, and 6, the parameter monitored by the first logic means (303,304,305) of Hohri is the voltage of the primary power source (see column 4, lines 35-54).

As to claims 3 and 5, the primary power source (3,301) of Hohri is three phase, and Hohri discloses the first logic means (303,304,305) monitoring the failure of one phase of the three phase source (3,301) (see column 4, lines 55-63).

As to claim 8, Hohri does not disclose the 10% of nominal voltage value, however, selections of operational levels for an electronic device are engineering decisions based upon the system's intended use and expected requirements of the systems with which it will interface. See MPEP §2144.04 IV(A). In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

***Allowable Subject Matter***

10. Claim 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: Claim 7 contains allowable subject matter because none of the prior art of record teaches or discloses the parameters monitored by the first logic means being different from those parameters monitored by the second logic means, in combination with the remaining claimed features.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patents to Moakler et al. (4,405,867), Vogman (6,628,013), and Radusewicz et al. (6,876,103) teach similar devices.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hik



BRIAN SIRCUS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800